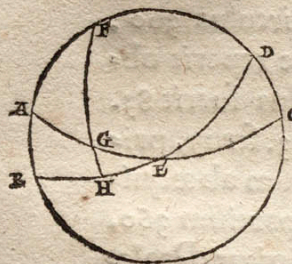


num cælum mediare dicimus, qui utrunq; etiam  $\text{xxiiii.}$  horarũ  
spacio signiferum cum æquinoctiali transmittit, dirimitq; secan-  
do eorum à sectione uerna uel autumnali circumferentias, diri-  
miturq; uicissim ab illis intercepta circūferentia. Cumq; sint om-  
nes maximi, constituunt triangulũ sphericũ orthogoniũ, rectus  
quippe angulus est, quo meridianus æquinoctialẽ per polos, ut  
definitum est, secat. Vocant autẽ circumferentiã meridiani, siue  
cuiuslibet per polos circuli sic interceptã declinationẽ zodiaci se-  
gmenti. Eam uero quæ ex circulo æquinoctiali cõsentit, ascensio-  
nem rectã, simul exeuntẽ cũ compari sibi zodiaci circūferentia.

Quæ omnia in triangulo cōuexo facile demonstrātur. Sit enim  
 ABCD circulus transiēs per polos æquinoctialis simul & zodiaci.

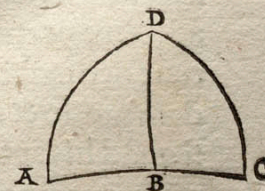
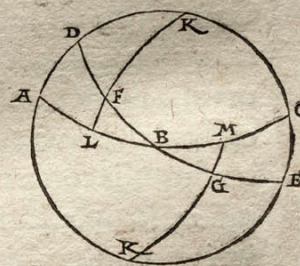


quē pleriq; Colurū solstitiorū appellāt: medietas  
signiferi  $AEC$ , medietas æquinoctialis  $BED$ , sectio  
Verna in  $B$  signo, Solstitiū in  $A$ , Bruma in  $C$ . Af  
sumatur autē  $F$  polus cotidianæ reuolutionis, &  
ex signifero  $EG$  circumferentia partiū, uerbi gra  
tia,  $xxx$ . cui super inducatur quadrans circuli  
 $FGH$ . Tunc manifestum est, quod in triangulo

$\text{EGH}$ , datur latus  $\text{EG}$  partiū  $\text{xxx}$ . cum angulo  $\text{GBH}$ , cum fuerit  
 minimus partiū  $\text{xxiii}$ . scrup.  $\text{xxviii}$ . secundū maximā decli-  
 nationem  $\text{AB}$ , quibus  $\text{ccclx}$  sunt quatuor recti, & angulus  $\text{GHE}$   
 rectus est. Igitur per quartū sphaericorū ipsum  $\text{EHG}$  triangulū  
 datorum erit angulorū & laterū. Nempe demonstratum est, qđ  
 subtensa duplicis  $\text{EG}$  ad subtensam duplicis  $\text{GH}$ , est sicut subten-  
 dentis duplā  $\text{AGE}$ , siue dimetiētis sphaeræ ad subtensam duplicis  
 $\text{AB}$ , & semisses earum similiter, quoniam dupli  $\text{AGE}$  semissis est  
 ex centro partiū  $100000$ . & quæ sub  $\text{AB}$  earundē partium  $39822$ .  
 at  $\text{EG}$  partiū  $50000$ . & quoniā si quatuor numeri proportiona-  
 les fuerint, quod sub medijs cōtinetur, æquale est ei quod sub ex-  
 tremis, habebimus semissem subtēdentis duplā  $\text{GH}$  circūferenti-  
 am partiū  $19911$ . & p ipsam in canone eandē  $\text{GH}$  partiū  $\text{xi}$ . scrup.  
 $\text{xxix}$ . declinationē segmento  $\text{EG}$  respondentē. Quapropter &  
 in triangulo  $\text{AFG}$  dant latera  $\text{FG}$  partiū  $\text{Lxxviii}$ . scrup.  $\text{xxxi}$ .  
 &  $\text{AG}$  earundē  $\text{Lx}$ . tanqđ reliqua quadrantī, & angulus  $\text{FAG}$  est  
 rectus, eodem modo subtendentes dupliciū  $\text{FG}$ ,  $\text{AG}$ ,  $\text{FGH}$ , &  $\text{BH}$ ,  
 siue

siue eorum semisses proportionales. Cum aut ex his tres sunt da-  
tæ, dabitur etiam quarta <sup>BH</sup> partium 62. scrup. 6. ascensio recta à  
puncto solstitij, siue <sup>HE</sup> partium 27. scrup. 54. à uerno æqui-  
noctio. Similiter ex datis lateribus <sup>FG</sup> partium 78. scrup.  
31. & <sup>AF</sup> earundem partium 66. scrup. 32. & quadrante circuli,  
habebimus angulum <sup>AGF</sup> partium 69. scrup. 23. s. proxime,  
cui ad uerticem positus <sup>HGE</sup> est æqualis. Hoc exemplo & in  
cæteris faciemus. Illud autem non oportet ignorare, quòd me-  
ridianus circulus signiferum in signis quibus tropicos contin-  
git ad rectos secat angulos, Nam per polos ipsum tunc secat, ut  
diximus. Ad puncta uero æquinoctialia eo minore recto faciat  
angulum, quo signifer à recto declinat, ut iuxta minimam qui-  
dem inclinationem partium sit 66. scrup. 32. Est etiam animad-  
uertendū, quòd ad æquales signiferi circumferentias, quæ ab æ-  
quinoctialibus tropicisue punctis sumuntur, anguli & latera tri-  
angulorū sequuntur æqualia, quemadmodū si descripserimus

æquinoctialis circumferentiâ  $ABC$ , & signifi-  
 rum  $DBE$ , sese in  $B$  signo secâtes, in quo sit æq-  
 noctiũ, assumpserimusq; æquales circumfe-  
 rentias  $FB$  &  $BG$ , atq; per polos motus diurni  
 binos quadrantes circularum  $KFL$  &  $HGM$ ,  
 erunt bina triangula  $FLB$  &  $BMG$ , quorũ late-  
 ra  $BF$  &  $BG$  sunt æqualia, & anguli q ad  $B$  uer-  
 ticem, & qui circa  $L$  &  $M$  recti, Igitur per VI. sphæricorum æqua-  
 lium laterum & angulorũ, Ita  $FL$  &  $MG$  declinationes æquales  
 & ascensiones rectæ  $LB$  &  $BM$ , & reliquus angulus  $F$  reliquo  $G$ , Eo-  
 dem modo patebit in assumptis à puncto tropico equalibus cir-  
 cumferētijs. Veluti cum  $AB$  &  $BC$  hinc inde æquales fuerint à tro-  
 pico contactu  $B$ : deductis enim ex  $D$  æquinoctia-  
 lis circuli polo quadrantibus  $DA, DB$ , erunt simili-  
 ter bina triangula  $ABD$  &  $DBC$ , quorum bases  $AB$ ,  
 &  $BC$ , & latus  $BD$ , utriq; commune sunt equalia, &  
 anguli qui circa  $B$  recti, per VIII. sphæricorũ de-  
 monstrabuntur triangula ipsa æqualiũ esse latera  
 & angulorũ: quo manifestũ fit, qd unius in signi-  
 fero quadrantis anguli, tales & circumferētiæ expositæ reliquis



h    ñ    totius